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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/817,589	04/02/2004	Linda Zhong	026471-0901US	4922
61807 7590 09/18/2008 MAXWELL TECHNOLOGIES, INC. 9244 BALBOA AVENUE SAN DIEGO, CA 92123			EXAMINER HA, NGUYEN T	
			ART UNIT 2831	PAPER NUMBER
			MAIL DATE 09/18/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/817,589	<b>Applicant(s)</b> ZHONG ET AL.	
	<b>Examiner</b> NGUYEN T. HA	<b>Art Unit</b> 2831	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) 1-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22-52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>0608</u> .  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

The petition filed on 6/24/2008 has been treated as a request for reconsideration of the election of species requirement mailed on 1/14/2008. The requirement is hereby GRANTED and the previous office action is hereby withdrawn.

Upon for the consideration it has been determined that a restriction requirement is needed as follow:

#### ***Election/Restrictions***

During a telephone conversation with Thomas J. Osborne on 7/23/2008 a provisional election was made to prosecute the invention of II, claims 22-52. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-21 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 22-52 are rejected under 35 U.S.C. 102(b) as being anticipated by Kao (EP 0617441).

Regarding claim 22, Kao discloses a blend of dry particles fibrillized for use in the manufacture of a coated electrode, comprising: a mixture of dry fibrillized dry carbon and dry binder particles (page 2, lines 37-39).

Regarding claim 23, Kao discloses the dry binder particles comprise a polymer, and wherein the dry carbon particles comprise activated and conductive carbon (page 2, lines 17-19).

Regarding claim 24, Kao discloses the binder comprises fluoropolymer particles (page 3, lines 36-37).

Regarding claim 25, Kao discloses the binder comprises PTFE (page 3, lines 36-37).

Regarding claim 26, Kao discloses the binder comprises particles subjected to high shear forces (page 3).

Regarding claim 27, Kao discloses the high shear forces are applied by gas at more than about 60 PSI.

Regarding claim 28, Kao discloses the binder comprises milled polymer particles (page 3, lines 36-37).

Regarding claim 29, Kao discloses the binder comprises jet milled polymer particles (page 3, lines 36-37).

Regarding claim 30, Kao discloses the binder comprises hammer milled polymer particles (page 3, lines 36-37).

Regarding claim 31, Kao discloses the electrode is an energy storage device electrode (page 2).

Regarding claim 32, Kao discloses the energy storage device is a capacitor (page 2).

Regarding claim 33, Kao discloses an electrode, comprising; a dry blend of dry carbon particles and dry binder particles subjected to high shear forces (page 2, lines 37-39).

Regarding claim 34, wherein the blend comprises approximately 50% to 99% activated carbon (page 4, lines 29-30, which is within the claimed range).

Regarding claim 35, wherein the blend comprises approximately 0% to 25% conductive carbon (page 4, lines 29-30, which is within the claimed range).

Regarding claim 36, wherein the blend comprises approximately 0.5% to 20% fluoropolymer (page 4, lines 29-41, which is within the claimed range).

Regarding claim 37, Kao discloses the blend comprises approximately 80% to 95% activated carbon, approximately 0% to 15% conductive carbon, and approximately 3% to 15% fluoropolymer (page 4, lines 29-41, which is within the claimed range).

Regarding claim 38, Kao discloses the electrode is a capacitor electrode (page 2).

Regarding claim 39, Kao discloses the electrode is a double-layer capacitor electrode (page 2).

Regarding claim 40, Kao discloses the electrode is a battery electrode (page 2).

Regarding claim 41, Kao discloses wherein the electrode is a fuel-cell electrode (page 2).

Regarding claim 42, Kao discloses further comprising a current collector (18), wherein the binder and carbon particles are in the form of coated dried slurry, wherein the slurry is coupled to the current collector (page 4, lines 29-34).

Regarding claim 43, Kao discloses a capacitor product, comprising; a dry fibrillized blend of dry particles subjected to high shear forces, the particles including binder and carbon particles; and one or more current collector, wherein the blend of dry particles are disposed onto the one or more current collector as a coating (figure 1, and page 2, lines 29-36).

Regarding claim 44, Kao discloses between the one or more current collector and the dry particles is disposed a bonding layer (figure 1).

Regarding claim 45, Kao discloses the one or more current collector comprises aluminum (page 3, lines 25-29).

Regarding claim 46, Kao discloses further comprising a housing, wherein the one or more current collector is shaped as a roll, wherein the roll is disposed within the housing (figure 1).

Regarding claim 47, Kao discloses within the housing is disposed an electrolyte (figure 1).

Regarding claim 48, Kao discloses the electrolyte comprises acetonitrile (page 2).

Regarding claim 49, it is inherent that Kao's capacitor is rated to operate at a voltage of no more than about 3.0 volts.

Regarding claim 50, Kao discloses an energy storage device, comprising: dry fibrillized electrode means for providing coated electrode functionality in an energy storage device (page 2).

Regarding claim 51, Kao discloses a capacitor, the capacitor comprising: a housing; a cover; a collector, the collector disposed in the housing, the collector comprising two ends, a first end coupled to the housing, a second end coupled to the cover; a dried electrode slurry, the dried electrode slurry disposed as a coating onto the collector, the dried electrode slurry comprising a dry fibrillized blend of dry carbon and dry polymer, the dry fibrillized blend comprising of essentially no processing additive and an electrolyte, the electrolyte disposed in the housing.

Regarding claim 52, it is inherent that the Kao's capacitor comprises a capacitance of greater than 1 Farad.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NGUYEN T. HA whose telephone number is (571)272-1974. The examiner can normally be reached on Monday-Friday from 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F. Gutierrez can be reached on 571-272-2245. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nguyen T Ha/  
Primary Examiner, Art Unit 2831